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10/658,925	09/10/2003	Basil Karanikos		3129

7590 01/30/2008  
Wolf Greenfield  
600 Atlantic Avenue  
Boston, MA 02110

EXAMINER
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DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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01/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/658,925

Applicant(s)

KARANIKOS ET AL.

Examiner

Joseph W. Drodge

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>082007</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

The Declaration under 37 CFR 1.132 filed December 3, 2007 is insufficient to overcome the rejection of claims 1-44 based upon an assessment of the rejections of the patent claims as set forth in the last Office action because of responses to arguments that have been addressed with the responses to the arguments presented in the "Response" submitted 12/3/2007:

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4,7,12-14,17,22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 (Sylvan) in view of Spiteri PG PUBS Document US2002/0185010.

Regarding independent claims 1,12 and 44, Sylvan discloses a coffee filter including a filter cartridge comprising a brew basket container with bottom and side walls in portion 64 extending upwards to a closing cover 62 having top opening 72 (column 4, lines 16-27). The cartridge houses filter element 16 with bottom 56 and sloping side walls 50 and 52 (column 3, lines 54-60), the filter element being *joined directly at a peripheral junction 24 with the adjacent interior wall surface of the cartridge housing (see column 3, lines 48-62 and figure 4)*. The filter element is of synthetic paper fibers such as of polypropylene. The interior of the filter cartridge is thus divided into a first chamber housing beverage 22 and second chamber 42 receiving outflow from the filter (column 3, line 66-column 4, line 3).

The filter of Sylvan is characterized as being intended or designed for disposal after a single use, and being totally self-supporting and resistant to sagging and collapse against the cartridge container walls when wetted, rigid, and particularly designed for preparing coffee beverages (column 3, lines 2-4 and 10-15).

The claims all differ in requiring the filter element to be fluted, hence pleated or corrugated. However, Spiteri teaches a disposable paper, fibrous, coffee filter element that is also disposable, free-standing, rigid and self-supporting (paragraphs 1 and 5-7), and has side walls which are fluted or pleated (see figures and paragraphs 9 and 11). The Spiteri filter, being fan-shaped, is also similarly shaped to that of Sylvan.

It would have been obvious to one of ordinary skill in the art to have modified the coffee filter device of Sylvan by utilizing a pleated or fluted filter, as taught by Spiteri, in order to further augment the self-supporting aspect of the filter. It would have also been expedient to

Art Unit: 1797

manufacture the filter element of Sylvan with the pleats/flutes of Spiteri to facilitate handling and packing/packaging, cost-effective production, and provide stiffness so as to ensure sufficient rigidity to avoid collapse or sagging when wetted, as explained at paragraphs 6 and particularly 7 of Sylvan.

Regarding motivation to form the filter of Sylvan to have pleats or flutes so as to avoid sagging of the filter, a primary concern of Sylvan was to avoid sagging of a coffee filter when wetted and full of grounds. Sylvan stated in column 1, lines 25-38 that sagging of such filter against the support member walls of the brew basket would largely block the filtration flow or output of such filter and allow only the bottom of the filter member to be used for filtration flow. At column 2, lines 3-7, he states that avoidance of such sagging would enable the filter to maintain a substantial volume available for enhanced filter flow through. Spiteri also addresses the issue and states the desirability of preventing the walls of a coffee filter from sagging when wetted (paragraphs 5,6 and 8). Thus the avoidance of sagging would desirably increase the effective filtering area and area available for filtration flow, flow of filtered coffee.

Regarding various dependent claims, Sylvan also discloses features of the filter side wall and bottom walls, Sylvan also discloses features of brew basket container and side wall being parallel to container side and bottom wall respectively, height of filter side wall being between 50 and 100% of height of filter cartridge, cartridge and cover having impermeable walls and being frustoconical, upper rim 18 of the cartridge and top and bottom piercing means (70 and 74); all generally clearly illustrated in the figures.

Art Unit: 1797

Regarding claims 3,4,32 and 33, Spiteri teaches the filter side wall having pleats or flutes 32 functioning as filtrate exit channels (figures); flutes are considered a form of pleats or corrugations.

2. Claims 3,5,6,9-11,15-16,19-21 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of Spiteri, as applied to claims 1 and 12 and further in view of Daswick, U.S. 3,971,305.

Regarding Claims 5,6,15 and 16, Daswick discloses or suggests that the filter extends downward and away from the container at an angle of less than about 1 degree (Col. 4, Lines 1-4). It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Spiteri with the element of Daswick in order to provide portions spaced outwardly from the filter to allow flow freely outside the filter (Col. 4, Lines 1-5).

Art Unit: 1797

Regarding Claims 9-11 and 19-21, Sylvan in view of Spiteri does not disclose lower permeability and increased thickness in the lower region of the filter element. Daswick teaches a beverage filter cartridge wherein reduced permeability is achieved by increasing the thickness by lining the lower region of the filter element with an insert (Fig. 2, #28) of like filter material. It would have been obvious to one of ordinary skill in the art to modify Sylvan in view of Spiteri with the element of Daswick in order to retain the beverage media within the filter (Col. 3, Lines 11-15).

3. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of Spiteri, as applied to claims 1 and 12, and further in view of Michielsen, U.S. Patent No. 3,389,650.

Regarding Claims 8 and 18, Lesser in view of Tanner does not disclose channels increasing in width. Michielsen teaches a beverage filter cartridge comprising exit channels that increase in width to a maximum adjacent the filter bottom. (Fig. 1, #2). It would have been obvious to one of ordinary skill in the art to modify Sylvan in view of Spiteri with the element of Michielsen because it is a corrugated structure common in the filter art.

### *Response to Arguments*

Applicant's arguments filed December 3, 2007, together with the accompanying Declaration have been fully considered but they are not persuasive and are addressed together collectively.



Art Unit: 1797

It is argued that the coffee filters of Sylvan and Spiteri are self supporting in different ways and thus seek to avoid sagging in different respects, the Spiteri filter being supported from the bottom of the brew basket and the Sylvan filter being supported by being suspended from the cartridge container sidewall at the filter top edge. Applicant asserts that Spiteri is not concerned with tendency of a coffee filter to sag when wetted and filled with wetted coffee grounds, since it is supported by the bottom of the brew basket. The Declaration states that the skilled artisan would have expected the pleated Spiteri filter to be radially compliant and to contact the container walls during brewing, which Sylvan seeks to avoid.

It is submitted that Spiteri explicitly teaches design of a coffee filter that avoids sagging and drooping when wet, and maintains wall stiffness (paragraphs 7,8,10 and 12). It is appreciated that the Spiteri filter contacts the side walls of the brew basket container, when unfolded, even before operation. However, such contacting is understood to mean that only the apexes or splines of the pleats/flutes of the filter then contact the side walls, with the remainder of the surface area of the coffee filter remaining spaced from the side walls, with a continuing large area remaining available for filtration flow between the flute splines during coffee brewing, since sagging or drooping is avoided.



Art Unit: 1797

The Declaration and Remarks also argue that the use of a Spiteri-type filter in the Sylvan cartridge would not be an expedient to manufacture, handling, packaging or cost-effectiveness, generally since Spiteri concerns a more complicated filter arrangement. This is refuted by consideration that the filters of both Sylvan and Spiteri are necessarily manufactured, handled and packaged separately, by separate manufacturing steps, from those concerning the brewing basket, and other portions of the respective automatic drip-brewing, arrangements. Discrete handling and packaging steps, and perhaps shipping steps for the filters alone, are inherently required before the filters are joined or assembled to the remainder of the brewing assembly, or prepared for separate retail sale, respectively. Thus the manufacturers are motivated to find expedients for preparation of, handling, packaging and otherwise cutting costs for manufacturing the filters.

The Declaration and Remarks then point out differences between the Sylvan cartridge arrangement and the Spiteri arrangement. However, Sylvan and Spiteri are commonly concerned with coffee filters utilized in one form or another of an automatic coffee-brewing machine, and commonly utilize light-weight, portable paper or synthetic fiber coffee filters. It is urged that the skilled artisan of one form of automatic coffee brewing assembly would have been reasonably expected to investigate other forms of automatic coffee brewing assemblies when seeking to solve problems concerned with the filtering of the coffee-producing water.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 1797

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Roy Sample, can be reached at 571-272-1376. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/658,925

Page 10

Art Unit: 1797

JWD

January 25, 2008

/Joseph Drodge/

Primary Examiner, Art Unit 1797